Child's First Book on Creative Thinkers

Centre for Developing English Language Teaching
CDELT

Editors

Mona Abousenna, CDELT Director
Mourad Wahba, CDELT Consultant
Amal Kary, CDELT Researcher

Associate Editor
Araxy Deronian, CDELT Administrative and Editorial Assistant

Art and Technical Assistants
Boutheina Abou-Seif, Administrative Assistant
Joseph H. Thabet, CDELT Deputy Administrative Assistant
Mohamed Osman, CDELT Library Assistant
Sameh Nicola, CDELT Assistant
Ashraf Anis, CDELT Assistant

Centre for Developing English Language Teaching (CDELT)
P.O. Box 5101 Heliopolis-West
Cairo 11771

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Dear Reader,

The Child's First Book on Creative Thinkers is the first book for children ever produced by the Centre for Developing English Language Teaching (CDELT). It is directed to children in primary schools.

This book is about some creative thinkers in different fields of knowledge. The purpose of the book is to show the children how these thinkers were creative and the results of their creativity.

We consider this book to be the true beginning of creativity in education because creativity begins with the child. The meaning of creativity is explained in the accompanying book on the "History of Creativity".

We look forward to developing this book into a series on creative thinkers in other fields. By doing so, we could widen the scope of creativity to include more figures.

Therefore, we depend on your positive response. Please send us your comments and suggestions.

Mona Abousenna
CDELT Director

Dear Parents,

Dear Teachers,

The child in front of you is the future. It is the future you most sincerely want to make better than the present. We too join you in this desire. So, we have tried to connect our thoughts with yours and make available this book.

As you notice we do not include a glossary. We believe that you would enjoy discovering new meanings from the accompanying book.

You will also notice that there are no instructions on how to use the book. Please allow yourselves and your children to tap all creative possibilities in the process of using this book.

There are stickers for the creative figures introduced, stickers for the alphabet in different shapes, pages to colour, pages to create, crossword puzzle and infinite connections for you and your children to make.

We wish you to enjoy a happy and creative interaction with your children/pupils.

Amal Kary
CDELT Researcher

Dear Children

WHO IS THE CHILD?

Once upon a time, in 1806 a child was born in London. The story of his education is one of the most fantastic stories in the history of education. The best source for it is his own autobiography. In a nutshell, we could mention the following:

At the age of three he had started his reading of the Greek classics. At eight, after having read a list of Greek works which make the reputation of a classic instructor today, he started Latin. At the same time, he became the teacher of his younger sister.

After Greek and Latin came mathematics which he studied by himself. At that time he was eleven.

This child is the great English philosopher John Stuart Mill.

Dear child, you can be like him if you are convinced that you are creative by nature.

Mourad Wahba
CDELT Consultant

How to be Creative

Identify the problem to see whether it is a problem or not.
It might not be a problem at all but only an illusion.

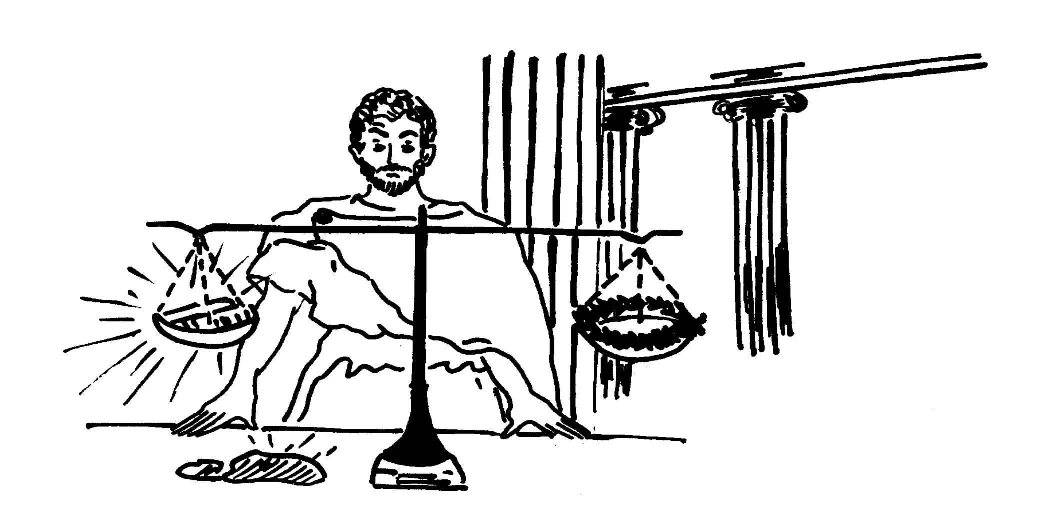
If the problem can be solved in a traditional way, then there will be no creativity.

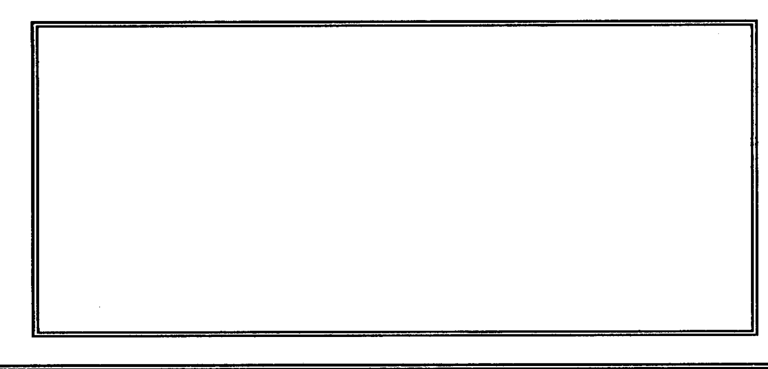
But if not then it is a problematic and not a problem.

A problematic implies contradiction that should be solved. The solution cannot be but creative.





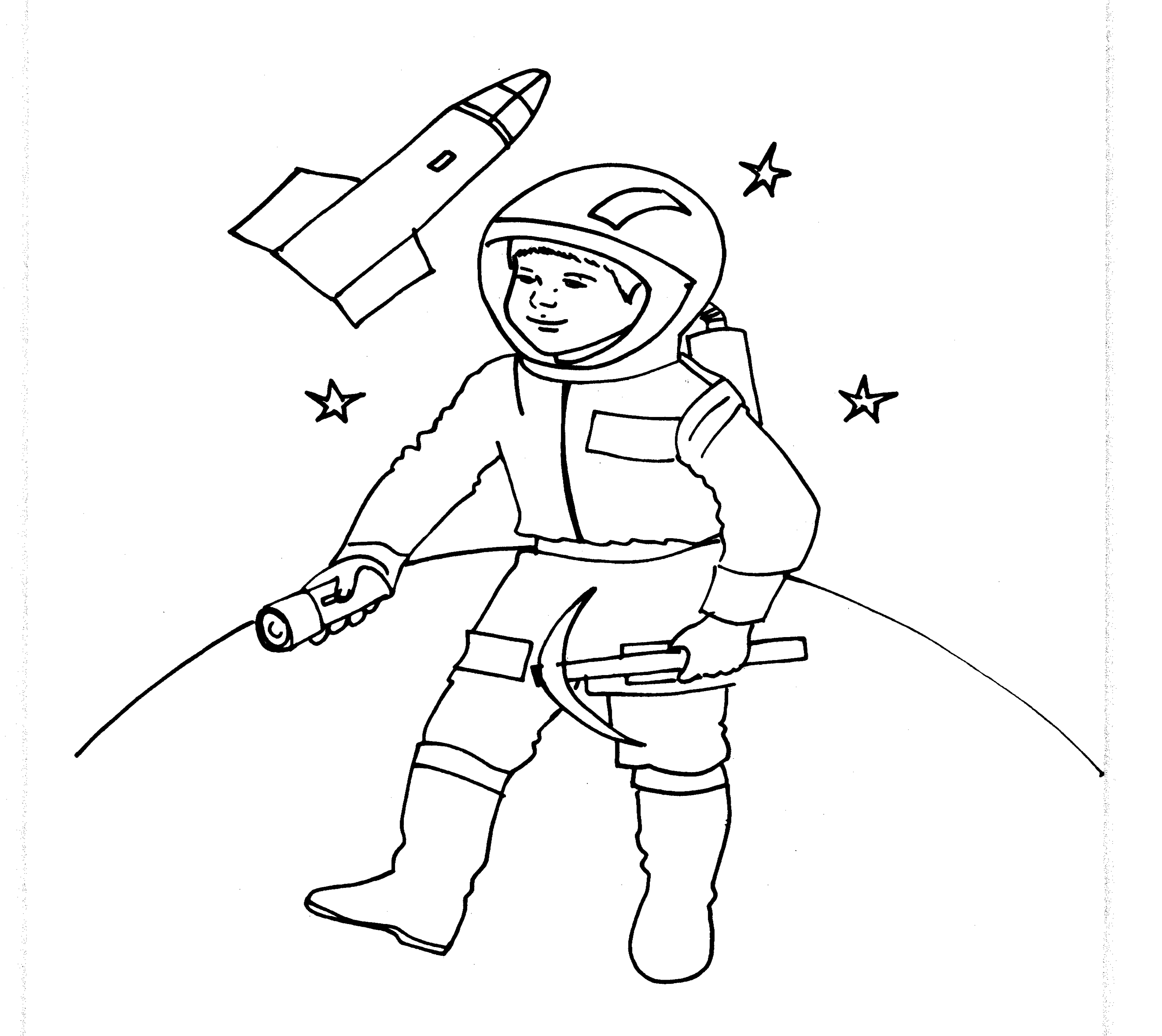


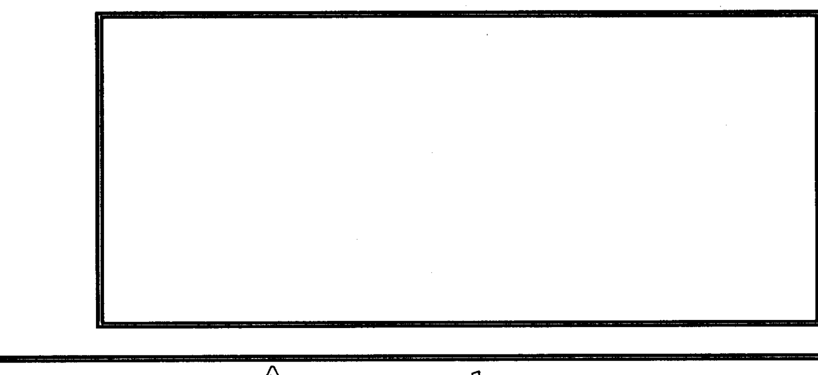


Archimedes

Archimedes (B.C. 287-212) is a Greek scientist of old times.
The King of Syracuse was given a beautiful crown of gold but he suspected it was mixed with silver. He ordered Archimedes to find the answer. Archimedes knew the weight of gold per volume. The problem was to find the volume of a crown without melting it down. He put the question "How to find the volume of an irregular shape?" One day, while taking a bath, he noticed that the water was rising around his body as he lowered himself in the water. At that moment the solution came to him. A solid object put in water would replace a volume of water equal to its own. He carried experiments and finally he set his well-known principle.

Establishing the relation between measuring the volume of a crown with taking a bath.





Armstrong

Neil Armstrong is an American astronaut born in 1930.

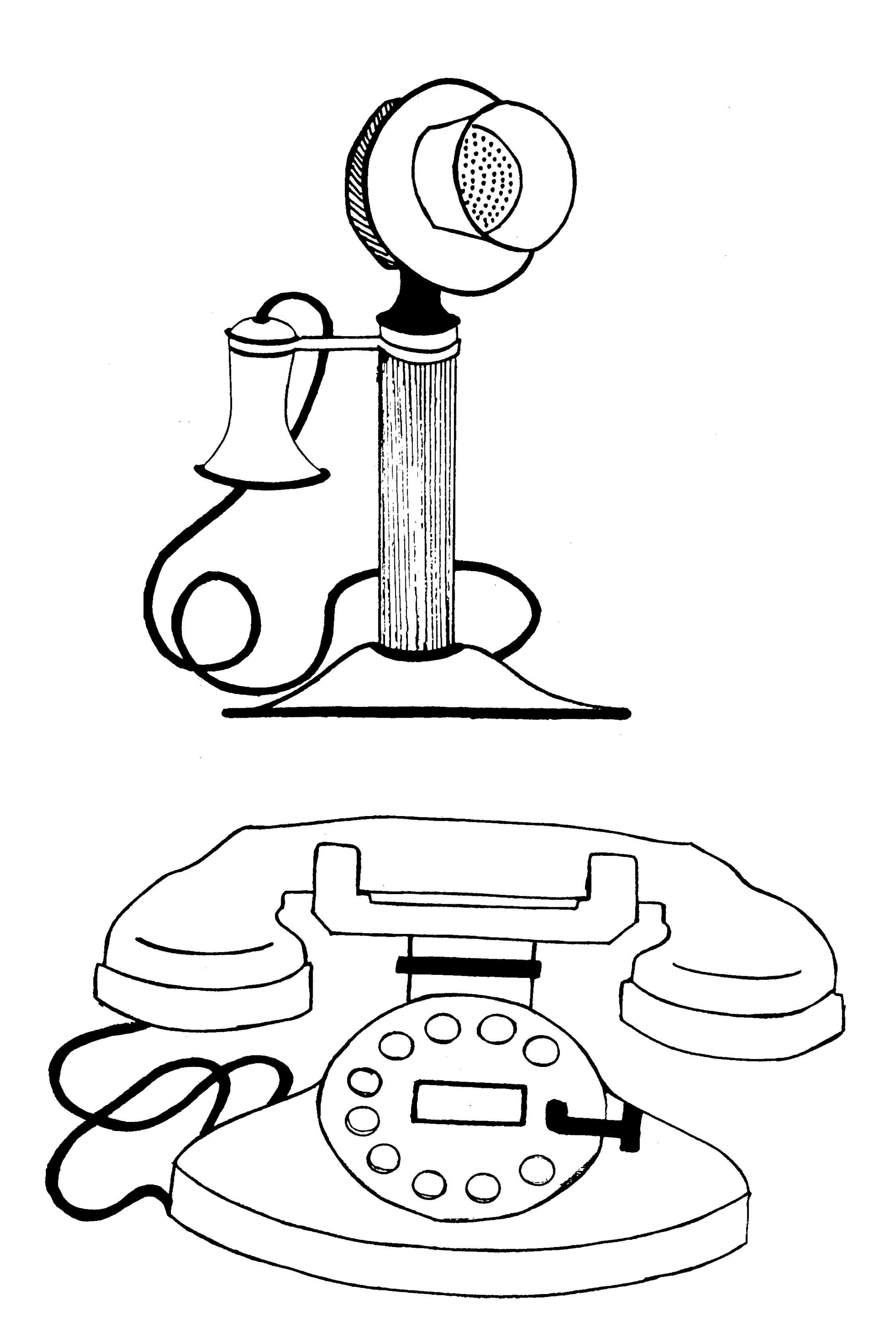
An astronaut is a sailor in space. Armstrong is the first man to walk on the moon on July 21, 1969.

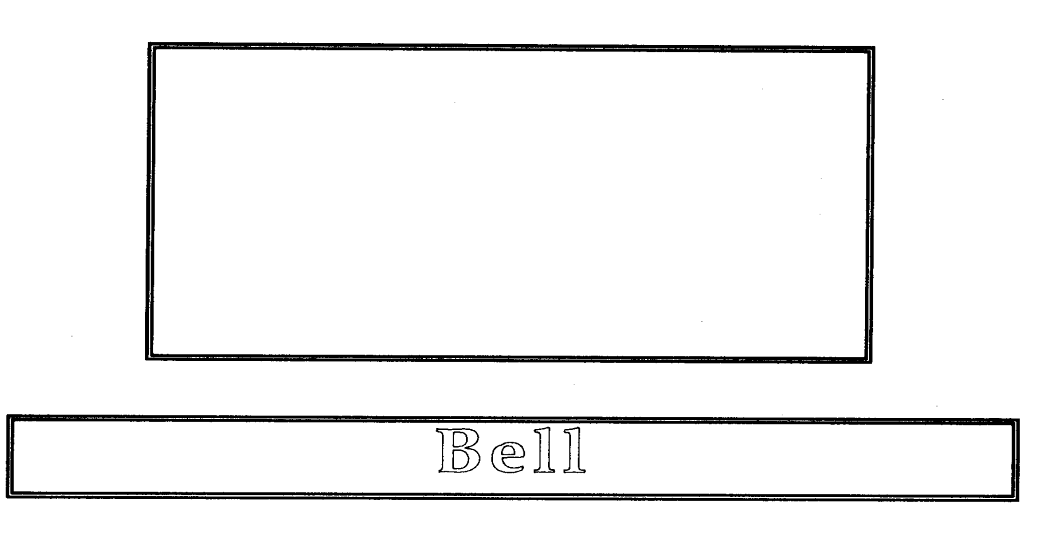
Upon landing on the moon Armstrong said "That's one small step for a man, one giant leap for mankind".

To become an astronaut you must be less than 34 years old, and in perfect health. You must have a good education and go through long training periods. You must study science and engineering and have at least 1000 hours of experience in flying jet airplanes.

The aim of space conquest is to discover the cosmos in scientific ways and open up new horizons.

Creativity makes a change in your outlook to the cosmos



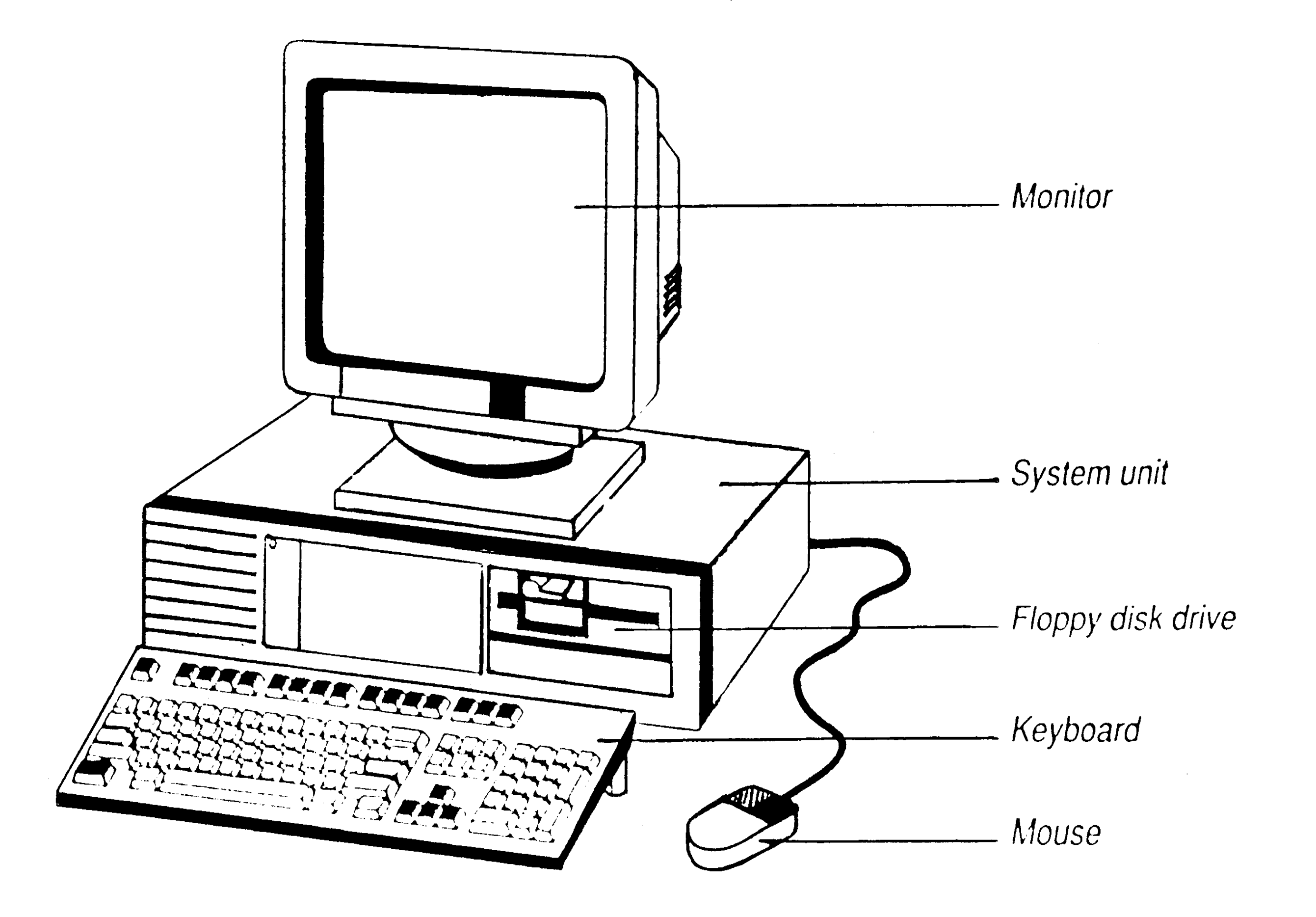


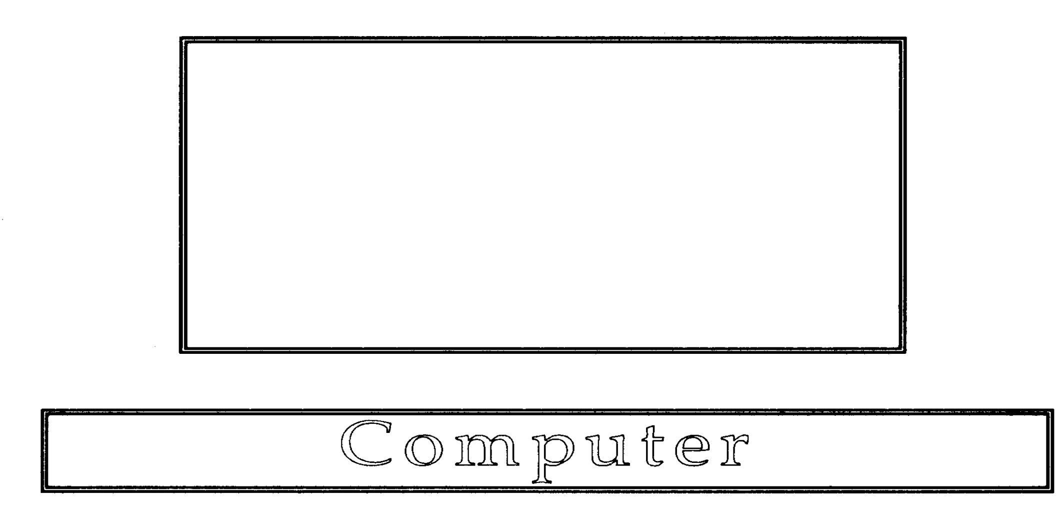
Bell

Alexander Graham Bell (1847-1922) is a Scottish American physicist.

He invented the telephone while trying (without success) to invent a hearing aid for the deaf people. Bell knew that sound waves strike the eardrum and go through the bone of the ear to the brain. He thought that the vibrations of the human voice could be carried to another ear in a similar way. He conducted experiments in sending the spoken word over a wire. He made many experiments and finally invented the first telephone. The invention of the telephone changed the world.

Creativity means establishing new relations and changing reality


Monitor
System unit
Floppy disk drive
Keyboard
Mouse

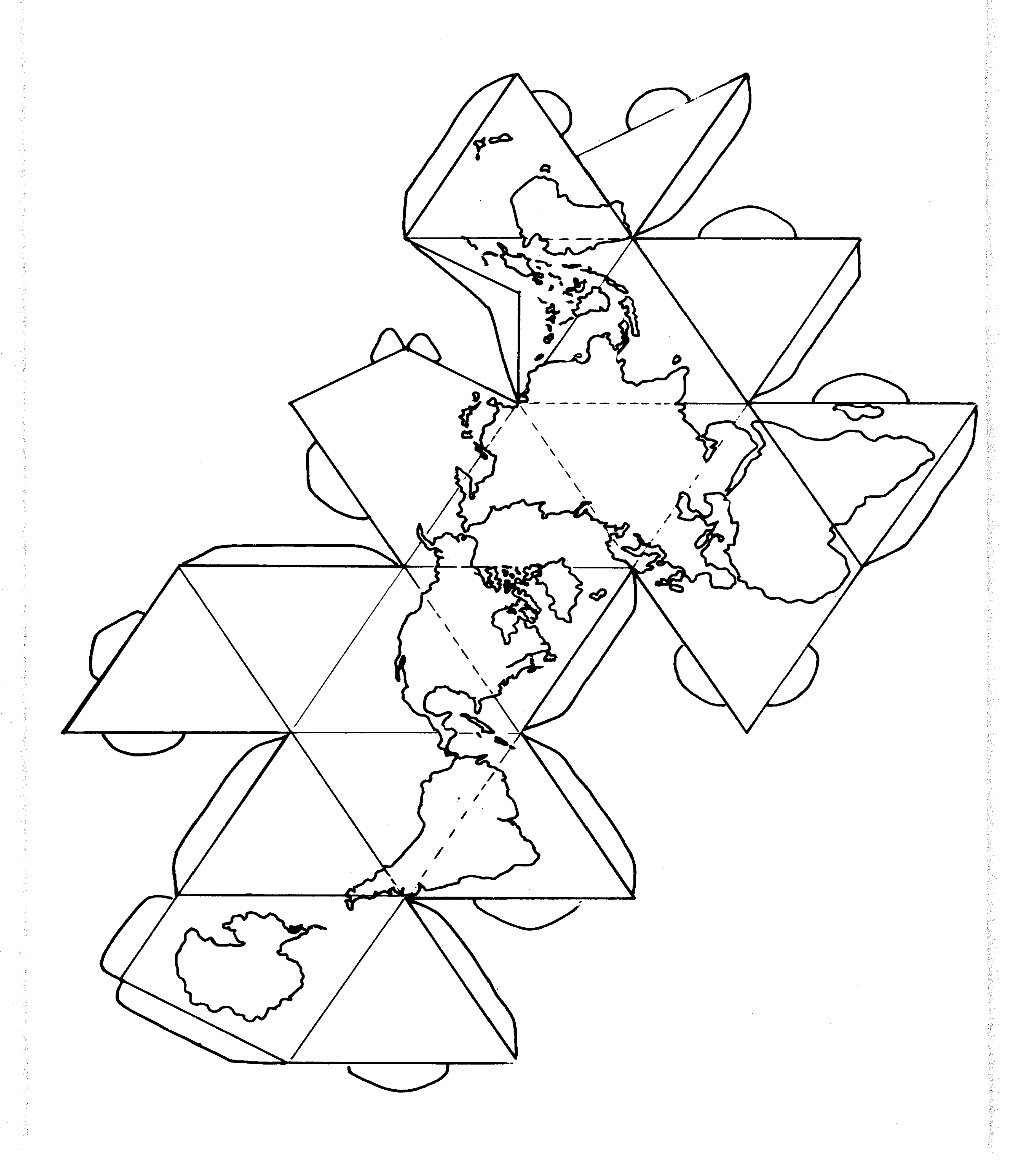


Computer

On the cover of the "Time" magazine in 1982 the following was written "Man of the Year". But there was no picture of a man but of a machine. That machine was the computer.

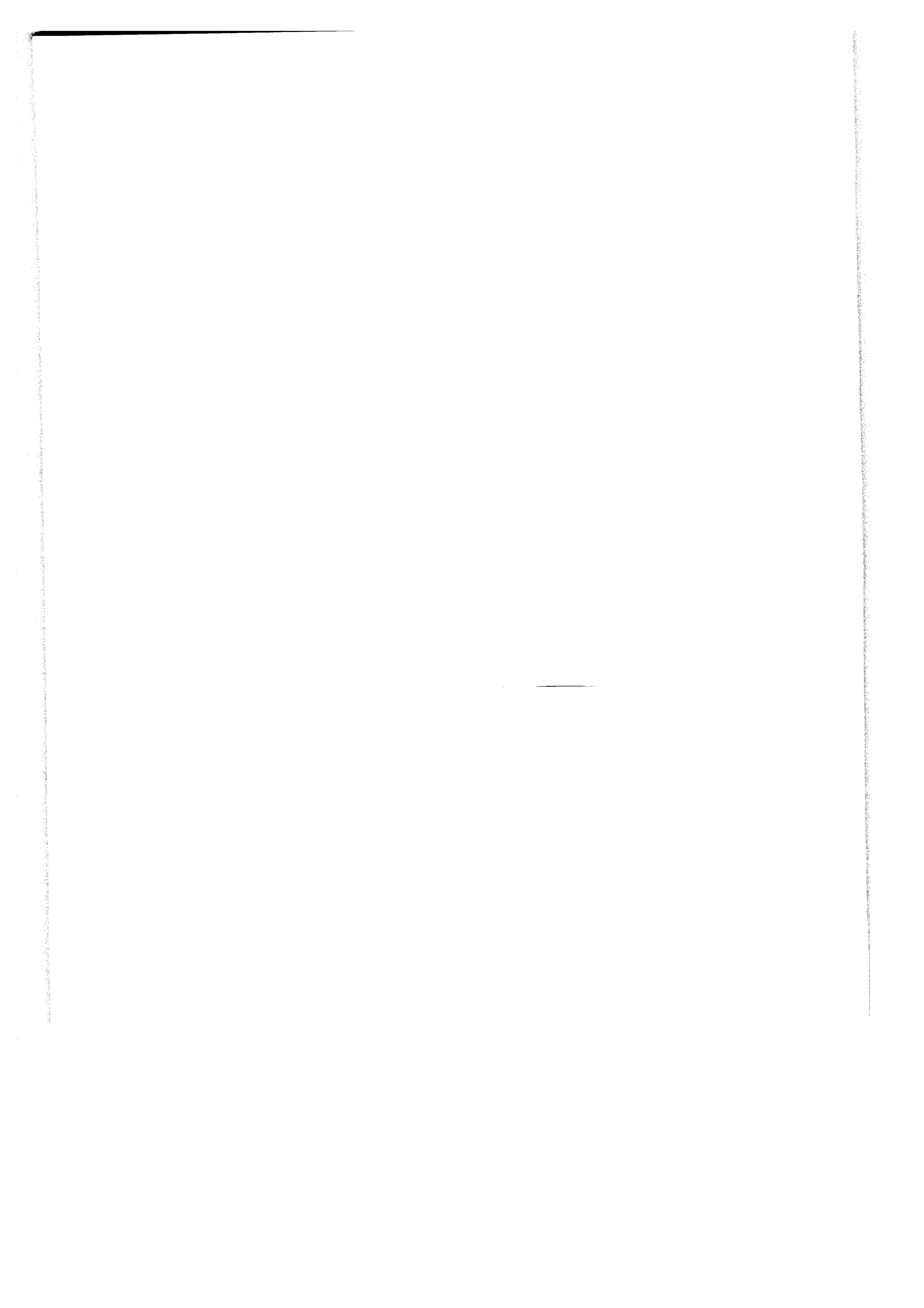
The computer of today is a machine that thinks, makes deductions and decisions.

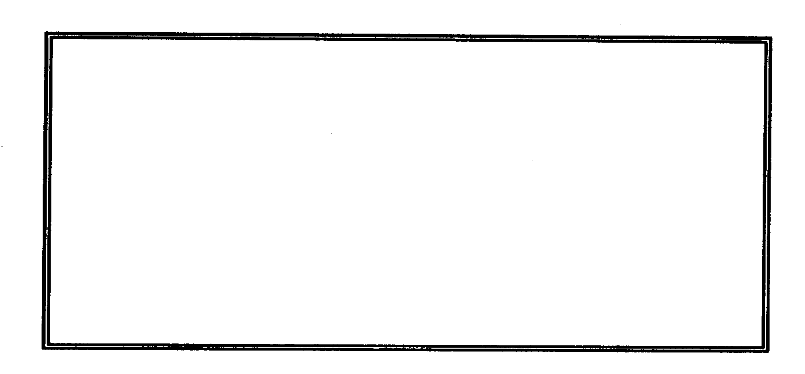
Deduction is one of the components of creativity



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C	C	C	C	C	C	C	C	C	C	C	C	C
D	D	D	D	D	D	D	D	D	D	D	D	D
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H	H	H	H	H	H	H	H		H	H	H	H
I	I	I	I	I	I	I	I	I	I	I	I	I
J	J	J	J	J	J	J	J	J	J	J	J	J
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Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z


Archimedes
Armstrong
Bell
Computer
Copernicus
Descartes
Disney
Edison
Einstein
Galileo
Creativity saves your life
Tolerance leads to creativity
Heisenberg
Lobachevsky
Naguib Mahfouz
Taha Hussein
Inert ideas stop critical and creative thinking
Whitehead





Copernicus

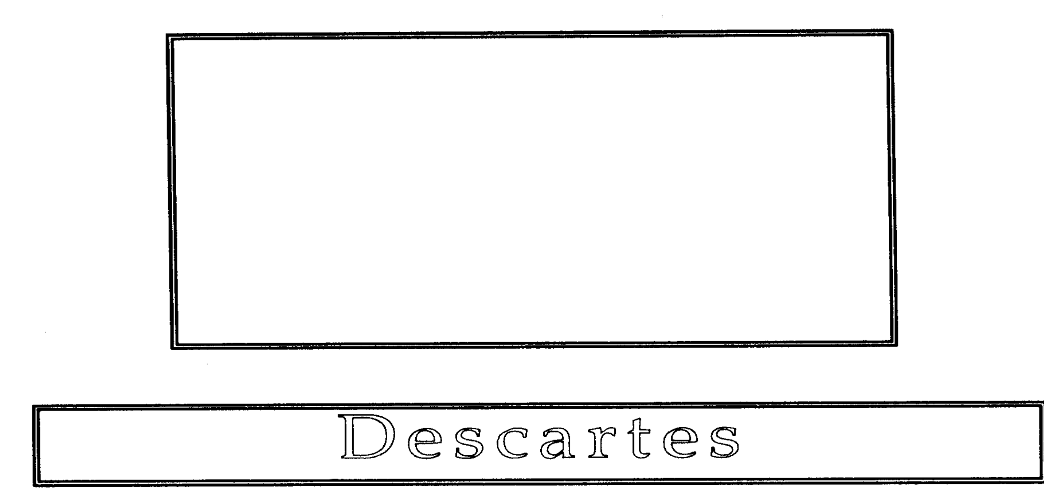
Nicolaus Copernicus (1473-1543) is a Polish astronomer.

For more than fourteen centuries Ptolemy said that the earth is fixed at the centre of the universe. He also said that the sun and the stars turned around it.

Copernicus changed this understanding. He proved that the earth rotates on its axis once daily and travels around the sun once each year.

This new understanding was against the cultural taboos of authorities at the time. The authorities were afraid of the new understanding and Copernicus was reluctant to publish it.

Cultural Taboos stop Creativity



Descartes

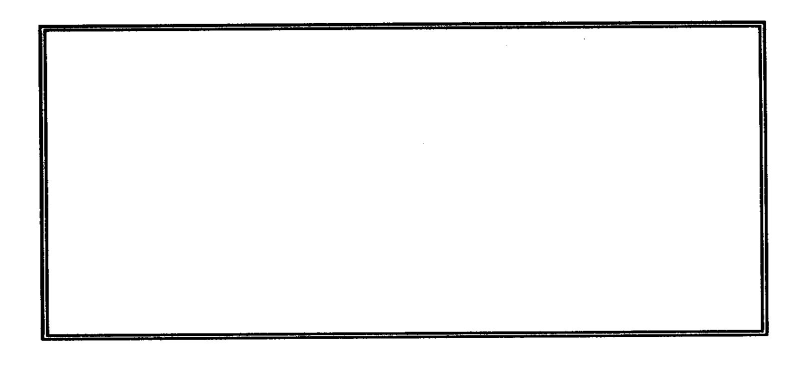
Rene Descartes (1596-1650) is a French philosopher.

He invented "methodical doubt" to arrive at truth. He said that truth should be clear and distinct.

If anything is not clear, you can use methodical doubt to make it clear.

Descartes used this method to arrive at a new way of thinking.

Creativity involves critical thinking



Heisenberg

Werner Heisenberg (1901-1976) is a German physicist.

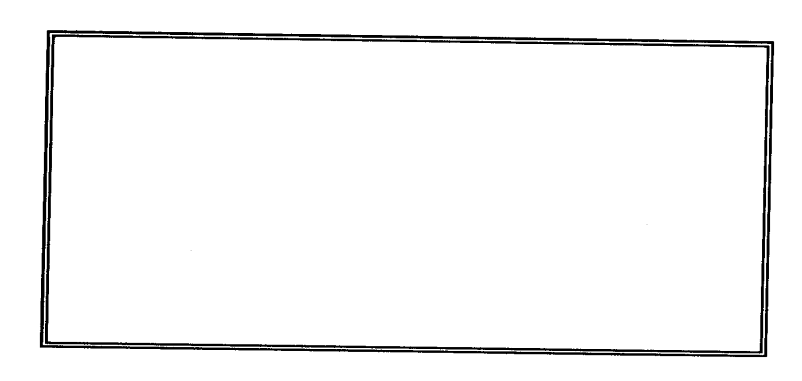
In 1927 Heisenberg created a new scientific principle, that is, the principle of uncertainty. It says that no event can be described with certainty. Certainty is against tolerance.

We could call his principle the principle of tolerance because all knowledge and all information between human beings can only be exchanged by tolerance.

Heisenberg won the Nobel Prize for physics in 1932.

Tolerance leads to creativity


Disney



Disney

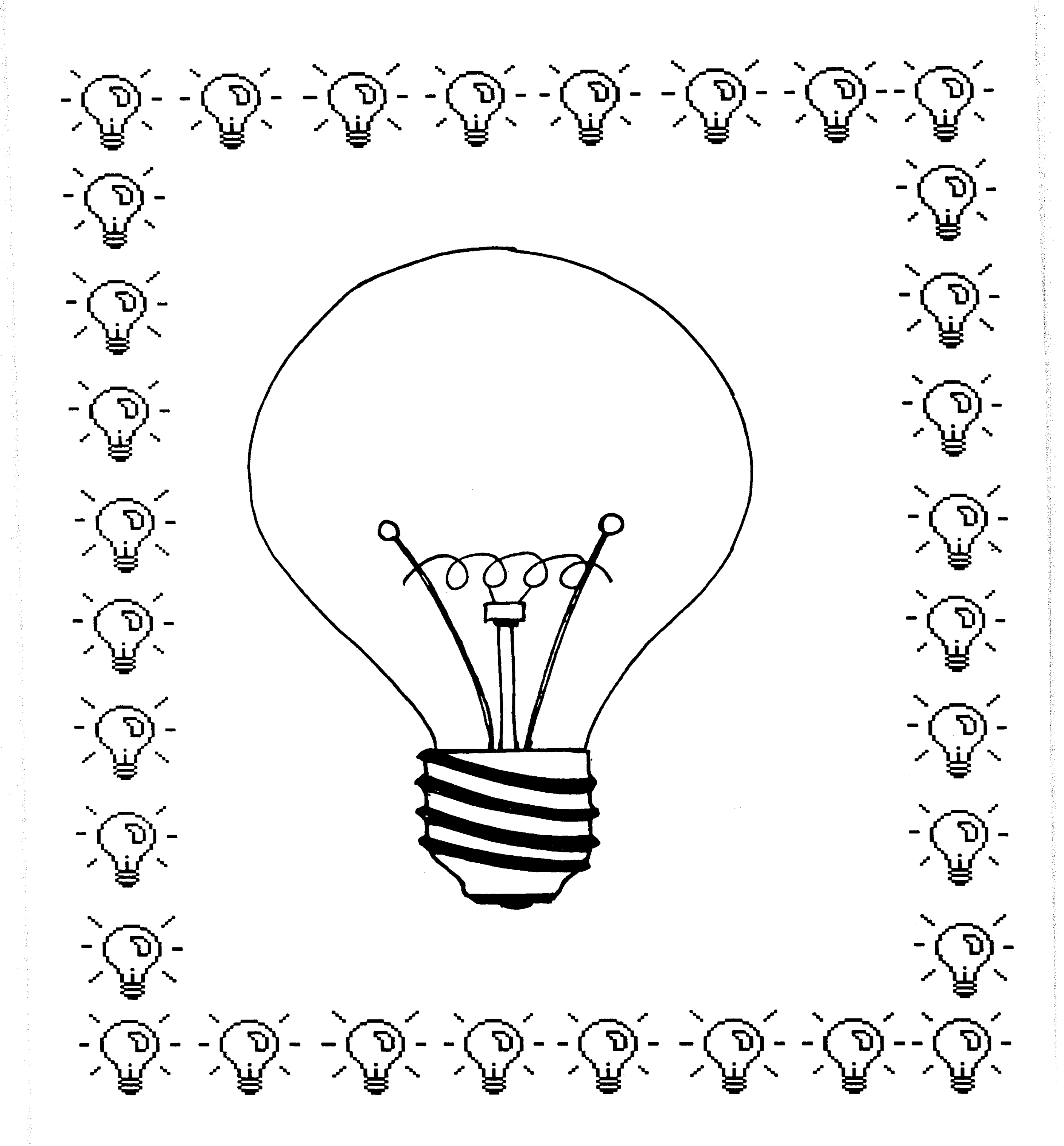
Walt Disney (1901-1966) is an American film cartoonist and director.

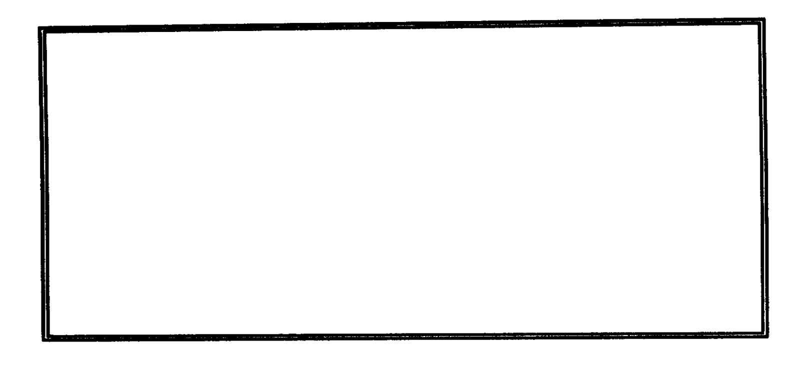
He created Mickey Mouse (1927), Donald Duck and other characters.

"Snow White and the Seven Dwarfs" (1938) was the first full-length animated cartoon he made. He also made animal documentary films and children's adventure films. Two vast amusement parks, Disneyland in California and Disneyworld in Florida, show his influence in the entertainment world.

He made new relations between cartoon and life. So, Mickey Mouse and Donald Duck became new heroes with new ideas.

Making new relations between cartoons and life





Edison

Thomas Alva Edison (1847 - 1931) is an American inventor.

When he was 12 years old, he started creating new ideas. He helped in the invention of the telegraph, telephone and phonograph.

Scientists wanted to make an electric lamp. The problem was to heat a filament by electricity to glow without breaking.

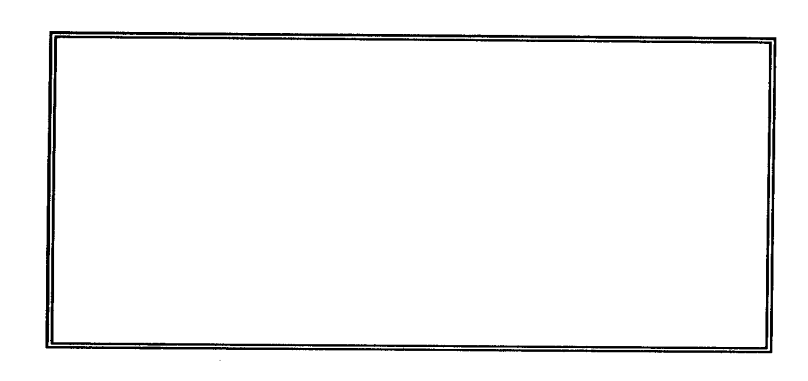
Edison found the material of a filament from a scorched cotton thread. He invented the light bulb which turned night into day.

Creativity is the ability to make new links which solve problems

THE MASTER'S UNIVERSE

In the dazzling world of relativity, ordinary time and space are replaced by baffling effects at odds with common sense





Einstein

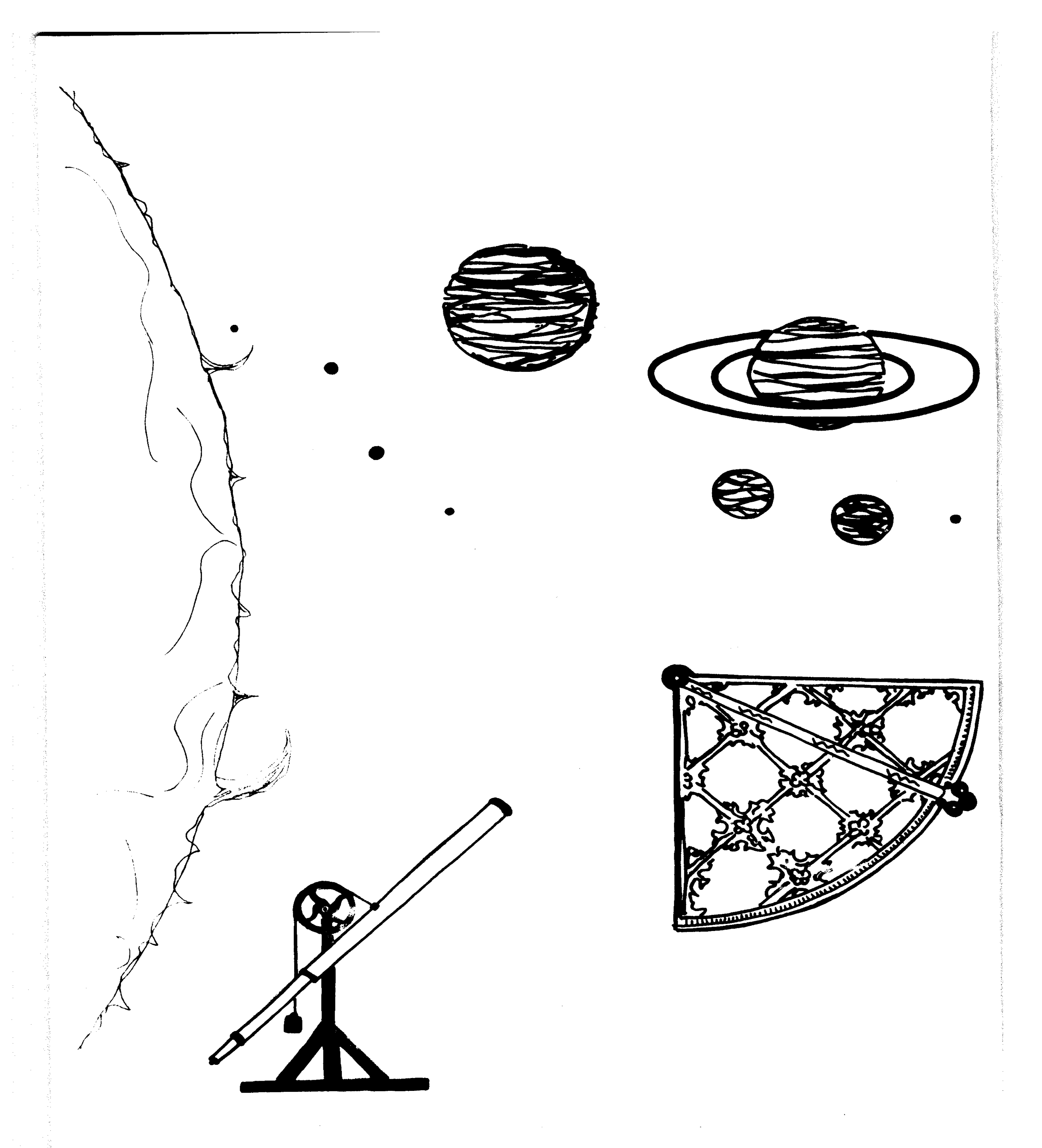
Albert Einstein (1879-1955) is a German-American Mathematical physicist.

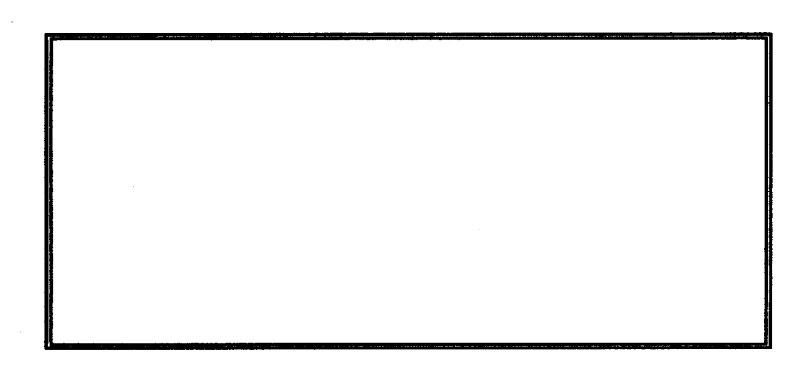
He influenced science in many fields, but is best known for his theory of relativity.

Einstein established the relation between mass, energy and time. This new relation resulted in the discovery of the atomic bomb and atomic energy.

Through this discovery a new reality was created.

Making a new relation between mass, energy and time





Galileo

Galilei Galileo (1564-1642) is an Italian astronomer and physicist.

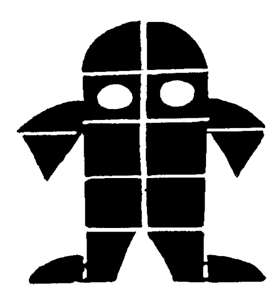
He was the first to use the telescope to observe the heavenly bodies. Never before had anyone viewed the sky except with the naked eye.

Thanks to this new relation between the telescope and the heavenly bodies new facts were discovered. The moon was not smooth as the astronomers had said but was uneven. Sunspots were also discovered.

This new discovery was against the prevailing belief at the time. It was strongly rejected. Galileo had to face a tribunal.

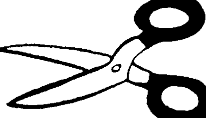
Creativity is against cultural taboos

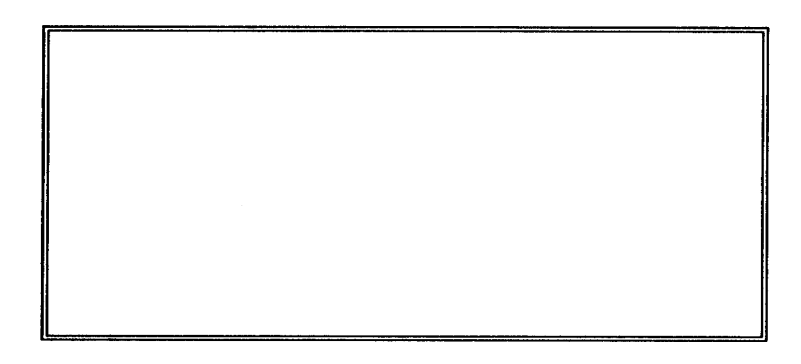
What else can you do? Try making your own funny creature!



Shapes

Cut out the shapes below. Here's a funny robot you can make with the shapes that you've cut out.





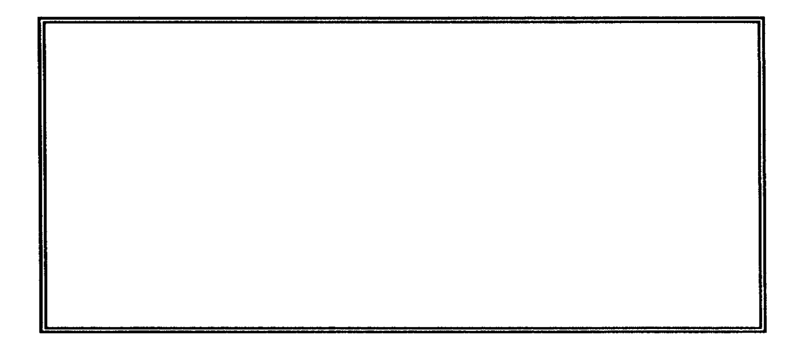
Lobachevsky

Nicolai Ivanovich Lobachevsky (1792-1856) is a Russian mathematician.

The elements of geometry created by Euclid were regarded by many scientists as something eternal. This led to dogmatic thinking.

Later on, mathematicians discovered that Euclidean geometry had a contradiction. They could not solve it. Instead they created a new non-Euclidean geometry. This was discovered by Lobachevsky.

Contradictions lead to creativity



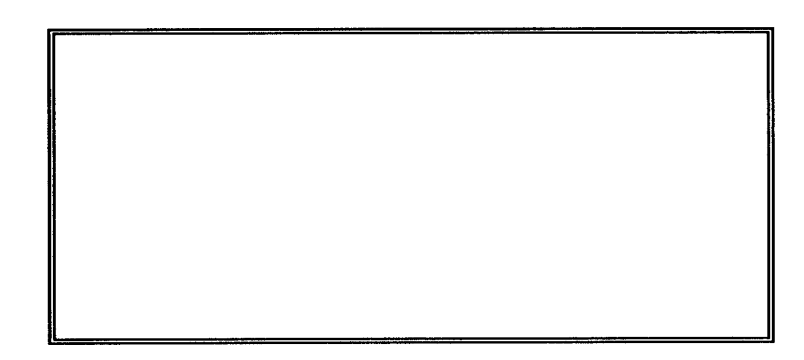
Naguib Mahfouz

Naguib Mahfouz is an Egyptian novelist born in 1911.

In 1988, he won the Nobel Prize. He was the first Arab to ever win this international prize.

In his novels and short stories, Naguib Mahfouz combines the local Egyptian life and people with common universal human values. Therefore, he became universal.

Making a new relation between local and universal values



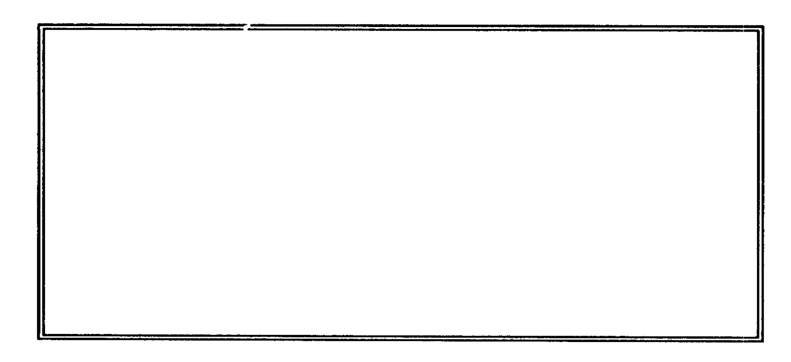
Taha Hussein

Taha Hussein (1889-1973) is an Egyptian thinker.

His famous words are "Education is like water and air." He wanted education to be for everyone. He thought that education is the only way to change reality .

He also established a new relation between Egypt and Europe through the Mediterranean culture. He became universal.

Making a new relation between cultures



Whitehead

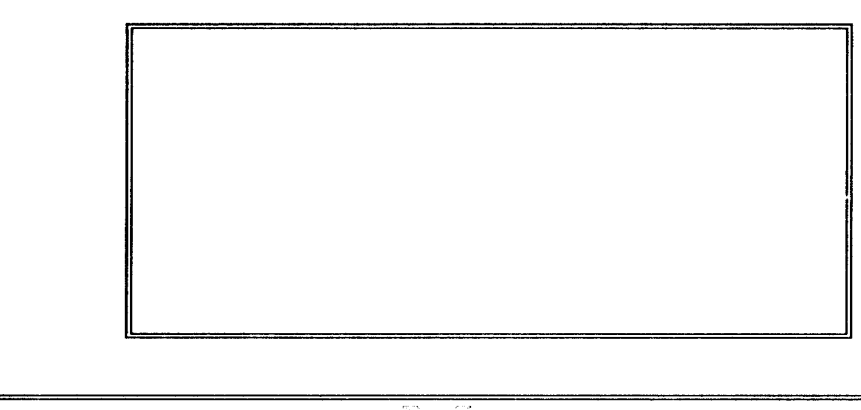
Alfred North Whitehead (1861-1947) is an American philosopher.

He wrote a book on "The Aims of Education".

In this book, he says that in training a child to activity of thought, we must beware of "inert ideas". Inert ideas are merely stored in the mind without being put into new relations.

Education which leads to inert ideas is not only useless, but also harmful.

Inert ideas stop critical and creative thinking



Man

A Greek myth says that when Oedipus approached the city of Thebes he found it besieged by a monster called the Sphinx. She had the face and breast of a beautiful woman, the body and claws of a lion and the wings of an eagle. She sat on the mountain leading to Thebes.

She asked all travellers a riddle: "What is the animal that has four feet in the morning, two at midday and three in the evening?" She devoured those who could not answer.

Then Oedipus came, faced the Sphinx and answered, "Man. He crawls on all four in infancy, stands upright in maturity and leans upon a stick in old age." The Sphinx fell over and died. The Thebans crowned Oedipus their king.

Creativity saves your life

Guess Who?

1. Found the relation between the volume of a liquid and body-weight.
2. First human who walked on the moon.
3. Discovered the telephone.
4. A machine that thinks and makes deduction.
5. Destroyed the old taboo that the earth is the centre of the universe with the sun and stars turning round it.
6. A critical thinker.
7. Established new relations between cartoons and life.
8. Invented the electric lamp.
9. Found the relation between mass and energy.
10. Used the telescope to discover the stars, the planets and the greatness of the universe.
11. Said that all knowledge and all information between human beings can only be exchanged by tolerance.
12. Said that dogmatic thinking can be changed into creative thinking.
13. Is the animal that has four feet in the morning, two at midday and three in the evening.
14. The Nobel prize winner for literature.
15. Made new links between cultures.
16. Said that inert ideas stop creative thinking.
17. Is creative by nature.

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